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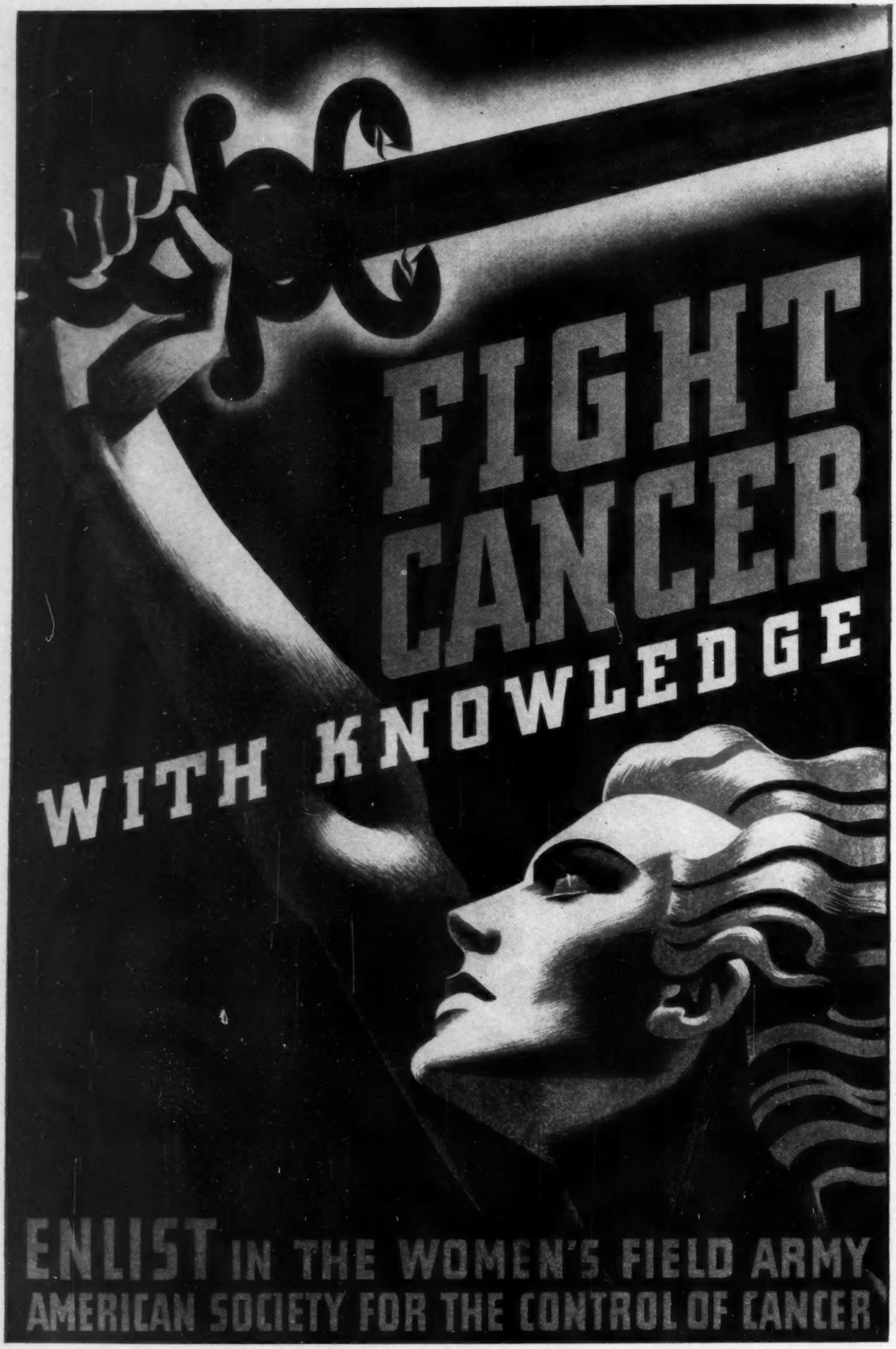
Vol. 42 January, 1941 JAN 2 1941 No. 5

CREATIVE ARTS • INDUSTRY • LEISURE • EDUCATION



The improvement in American poster design is becoming more marked each year, as is evidenced by the one shown above, the winner in this year's competition sponsored by the American Society for the Control of Cancer. The artist was Henry Koerner of Brooklyn, N. Y.

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DESIGN

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ARAUCANIAN ART

A case of fine handiwork—clothing and silver jewelry —by Araucanian Indians of the earthquake area in Chile was placed on exhibition by the Brooklyn Museum. Among the objects shown are a red and black mantle of the type worn by women, a pair of silver earrings with design of skull in relief and four pendant ornaments, and a pin consisting of a large metal disk with a long shaft attached to the side used for fastening the cloak over the breast. All come from the province of Cautin.

The origins of the Araucanian Indians are shrouded in mystery, legend and romance. Some believe that they were originally a people who inhabited the Pampas on the eastern side of the Andes where many Araucanian Indians are found today. Others believe that their culture originated within a forest area about one hundred miles wide and five hundred miles long in the plains of Chile and the western foothills of the Andes. Certainly they occupied this forest area before the Spanish conquest, for there are records of a previous conquest of Araucanians in this area by the Incas of Peru.

At the time of these conquests they were forest dwellers supporting themselves by hunting and primitive agriculture, making some pottery and simple textiles, practicing woodcrafts and the most rudimentary sort of farming and having no strong national government. Confronted by the Spanish invasion, they organized for war most effectively and prevented the Spaniards from conquering their land for two hundred years. This exploit has been immortalized in an epic poem by Ercilla called "La Araucana."

The Spanish invaders brought with them Indians from Peru who mingled with the Araucanians and taught them something about weaving and metal work in the period of warfare before the conquest became effective. The Araucanians displayed considerable skill in the new crafts, though they had nothing to contribute in design. The designs—chiefly geometrical, composed of simple crosses, squares, hooks and combinations of these motifs in chains, diapers, and borders—are all of Peruvian origin. A stylized human figure occasionally appears, but the great wealth of more complicated designs characteristic of ancient Peru is not seen on Araucanian weavings. Nor did they have the full secret of Peruvian tapestry weaving, since they sewed motifs into plain textiles where the Peruvians would have woven them in. The Araucanian designs are nevertheless skilfully handled and quite effective since they had a full range of pure colors and showed taste in their use.

The silver work bears a similar relation to northern metal work, with comparable techniques, forms and designs but without the same range. The Araucanian woman's costume consists of a robe fastened with a sash of decorative weaving, a rectangular clock either pulled over the shoulders and fastened in front with a large brooch, or draped over one shoulder, and other heavy silver ornaments composed of flat plaques with raised decoration.

Originally the wool for weaving was obtained from a species of lama, but sheep wool is used today and dyes of commercial manufacture have replaced the old vegetable dyes.

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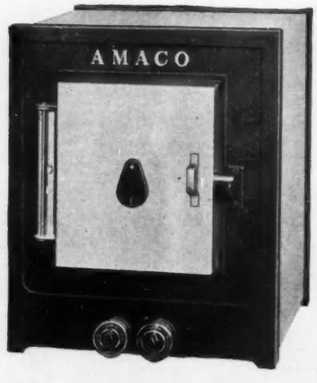

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THE EDITOR'S PAGE

The question naturally arises at this time of world confusion as to just what the position of Art Education, should be in a program of preparedness in America.

Obviously every citizen wishes to see a strong nation able to hold to its own against the high handed dictators. Their methods have demonstrated that those things which we refer to as culture mean nothing to them.

Every great war is bound to be accompanied by hysteria. And already we see many persons, even educators and school administrators, who seem to favor extensive programs which will put emphasis on increased physical strength. Larger muscles, increased physical powers in youth of America does not necessarily mean national strength.

What we must remember and constantly remind ourselves of, is that, in America, our strength will exist in maintaining all those things, and certainly those cultural institutions which we as a nation have built up during the past hundred years. Certainly our educational leaders, superintendents, supervisors and principals have the responsibility of keeping a clear outlook as to what the best educational standards dictate.

We want a nation of people who are poised, emotionally balanced, aware of those major values in life which are essential to the world's real progress.

Much has been said of late about the American way of life. That way of life means something to those citizens who look upon life seriously. It means freedom of expression, it means a wholesome growth in art appreciation, and participation. We have said much on this page regarding Art as a way of life in America. We can not afford to allow wartime hysteria divert our attention away from what we know, that national strength connotes a well rounded emotionally balanced youth. And there is a very good reason why the arts must not give way because of some confusion which makes short-sighted persons think that young children should develop bigger biceps to make a stronger America.

There is little value in giving up all those cultural advantages—on proper use of leisure, the arts, recreation and all those qualities we think of as forming our American way of life. What value can there be in our preparing to defend the American way of life while the same time we give up all those things of which it is composed.

Felix Payant

PSYCHOLOGY OF EXPRESSION

By MARY SWERER

Let us turn now to the first efforts of the tiny child. He searches and very soon finds muscular coordination which with the help of his environment will give to him the necessities of physical life, food and protection. About the fourteenth month another need seems to enter, or to emerge. It is the need for "expression," for building into form, pressing out into form, his desire to create. It becomes the activity of making marks with a point on a flat surface. So far this activity has been scarcely noticed for psychological revelation. The child has been punished for "marking things up," or the pencil has been taken away from him for fear of danger. This latter precaution is wise, but there should be put into the child's environment paper and other types of harmless pencils, such as wax crayons, of many colors, and with these he should be allowed to proceed. The markings show the child scribbling toward organizing. His knowledges are few, he perhaps, has none when we think of them in terms of conscious or directed energies. He replies to the impulse which is within him, utilizing the material in his environment to do it. Colors are used indiscriminately, skill at drawing is nil, but he gradually brings his lines, which are abstract, into form. They take on an appearance of organization, gradually evolving into a "center of interest" and "supporting elements." There is nothing communicable to the adult as to representational form of the environment. The horse, the man, the cat which are so definitely there for the child are merely a matter of lines, representing movement, the psychological value lies in his bringing his lines together in organized, or relational form. That he does not make the animal look like an animal, means nothing at this stage, but that he places that which he feels to be important in an important place, that he selects something to support it shows the growth of his being toward power to organize or to "express." This is perhaps the time that the cortex of the brain begins to produce organized movement, (which later results in judgment), in a very small way. The power for judgment is beginning to become a part of the organism. The power for creation is beginning to assert itself. The quality of response to the rhythm and balance of the environment is being answered and revealed.

Types of lines used, are straight vertical, horizontal or slant, and often point to the center of importance. The zig-zag combination and the enveloping curves appear soon, and differ with different types of children as to the amount of use of each, and the time of appearance. The child is expressing his desire to form; he is showing what has impressed him in his environment, and he has selected that part of it which for his use at that time is sufficient. He has discarded for the time being all other movement impressions. He is using color and is forming. He may proceed slowly, or at a more rapid pace, much dependent upon the stimulation and the encouragement of an intelligent and sympathetic environment, in which there is a maximum of patient waiting and a minimum of imposed instruction. His body of muscle and bone, organs and glands, and neural system is already well on the way to being an organized workable whole, but he is needing an expression of his spirit of beauty, his desire for action, his desire to become an individual. In all of it he is making his own record, an unadulterated statement of his reactions to the life about him. He is revealing what he has to start with on his own individual road toward fulfilling his destiny as a man, by revealing his power to organize, to express. The trouble has been so far that the adult has not been intelligent enough to read the pictures.

About the same time in the normal child, there is also the need and the power to express becoming apparent in the use of the sound expression and the body motility expression. The child may talk and sing, without anything intelligible to the adult, but it is meaning much to the child as can be seen by the different facial movements, smiling, laughing, mimicry. Dancing is attempted, perhaps as soon as walking. In all of this we see the **human** being emerging, we see the creator growing, and we may know that habits are forming, muscular habits which in turn are forming neural habits, and which finally selectively are forming the different parts of the brain. Expression no doubt forms the cortex of the cerebrum. Further impressions, from the environment, further expressions from the individual and we have the continual rhythm of the human creature. He uses all the lines which

the mature picture-maker uses. They are very few. The millions of variations which come with increased knowledge and experience, multiply the combinations of lines, but the vertical, horizontal and slant line, curved or straight, remain the fundamental relationships. The child's first efforts take the form of light or heavy single lines, these proceed to the zigzag and the whirling lines. Variations of these two definite combinations are practically all that the picture maker uses also. Thus we see in the child's first efforts the embryo picture, using the same basic lines as maturity uses.

As to colors, anything practically "goes". He loves it for its emotional stimulation. He does not discriminate, nor select to a great extent, altho some children may be unusual in this. Color, producing a more general emotional reaction, does not show the steady change that line does, the growth toward organizing ability. Organizing being a matter of exercise of judgment, it is quite possible that the line is the representative of the brain growth, the color, spontaneous color reaction, representing the emotional growth.

The daily work for several months following presents the child's struggles toward producing what must be his environment in the unified relationship in it. We can watch his efforts to make "things", everything revealing the sensitivity to the movement of things. The "duk on the wata" shows relationship of size, movement of duck head and body of different size, horizontal lines of water and of clouds in the sky. All the lines remain in the picture and quite well fill the space, the child is about 29 months old. We find soon the effort to show single things, but in practically all cases the verticality and the horizontality is very evident.

The child does not always have a purpose for drawing, but many times "just draws", colors go on just because they are "pretty colors". A few days often show great improvement in the matter of drawing things. The drawing of a dog with body, head, legs, tail all naturally organized, with hair-clippers, flower, an "elephant" in which was only the very definite movement of the trunk in a curve came a few days later. Then came "orange juice", a streak of orange color shot through a page of different colored marks which were noted as "I don't know".

A day or so later there came the first effort at showing the effect of the human environment. "A lady", with some sky, head, torso, arms, legs, dress, in fair proportion shows that the child was able to produce what was an impression of organization of the whole object. Many things are drawn, attempts at writing, numbers and letters, "counting", a flower with very definite ground about it.

At this time the child was singing most of the day, carrying the tune of a song which she had heard. She was also singing her own songs, with gestures, and much manipulation of the eyes. She was also very much interested in telling stories altho she could not talk in the social language. She knew evidently what she was saying, because when asked to repeat it, she would give the same inflections of the voice, laugh at the same places, and make gestures as before.

At 31¼ months a well-balanced organization was produced. A ship with wheels, anchor, water, all filling the space with a completeness that needed no alteration.

Drawings further show the effort to draw "things", as a rule these things are placed in some sort of relationship with something else. It shows, however, that attention, concentration on one part can push other things into the background of absence when a thing is interesting enough. Then comes the drawing of people. Shortly following the drawing of the "lidy" there came the picture of Daddy, Helen, and Mama together in their relation as to height, following the same order as trees drawn previously.

At about three years of age "Daddy's" head, side view and front view, shows natural form, fair placing of mouth, nose, ear, hair, eye, neck with collar and tie on it. A front view shows practically the same without ears, "he didn't need them".

Nothing has shown as fine an organization as the ship picture of 31 months of age until at 3½ years a picture of a boy "playing a violin" shows space divisions which would hold up under a much greater weight of knowledge and skills. The work remains highly abstract, that is, the adult must be told what each thing stands for, but the child is certain of this. Always the lines lead back into the picture, whatever they may mean. There is repetition, opposition, transition, emphasis, variety, return, all of the laws which are used by the mature to form a unity.

During the fourth year much progress is made in the matter of organizing many thoughts. There enters also the "plan" idea and a floor plan of the house appears slightly roaming in its character, but showing that the attention had been inveigled into seeing things in another way. About the same time appears the sensing of depth in things. The ability to express it as such satisfies the need then aroused, from now on there enters into all pictures the sky and the ground. Relationship is definitely a part of the mind movement with the hand keeping up in ability to express it. The church with its towers and bell, the house, playhouse and barn all begin to take on depth which is produced by curved flat space drawing with the crayons. At five very definite compositions of action showing many more things expressed, put into a form. More detail of clothing and body enters into the picture. At six another ship appears. It however shows the effects of pictures seen before, but the same parts of the ship as shown in the picture of 31¼ months are foremost.

Most of the picture-making described so far has been the work of one child, altho it has been constantly compared with the work of other children; the work was done at home with no imposed suggestions. The

neighborhood children came in at times, would draw and run out. Sometimes the drawing went on for days, sometimes it lapsed for days, due to many things. The mother of the child was an incentive to them all, altho she did not in any way force anything, attendance, instructions or any definite type of behavior.

Pattern design does not seem to enter into the unstimulated desire until later—the picture seems to be quite sufficient.

What has been going on in the being of the child during this period of babyhood and the emerging from it?

1. Contrary to many opinions the child is not so enveloped in his own ego that he sees nothing else, in fact the subjects for his pictures are those of the environment outside of himself.

2. He shows an ability to organize the symbols which for him stand for certain things, this ability seems to extend to at least 95% of the children. Just as his larger muscles grow with no particular stimulation from the environment, in order that the food needs and the protection needs may be met, just so do the muscles necessary for the expression so material. The adult in the environment has often placed unsurmountable hindrances in the way. The eye muscles and the smaller muscles of the hand naturally develop to some degree, they become the answer to the child's spiritual need for forming beauty, and his need for forming judgment. The fact that his drawings mean nothing to the adult from a representational standpoint does not bother him.

3. With the organization of the muscles comes the organization of the brain movement, which no doubt eventually forms the quality of the brain and its output, which is generally thought of in its finest sense as judgment and reason. The well-formed brain, resulting from the well-formed ability to make pictures, is just as definite as the well-formed hand resulting from rhythmical balanced movements in dancing, or the well-formed mouth resulting in the rhythmical quality of speaking.

Much attention has been given here to the pre-seven year old child somewhat because they have not been studied to such an extent as the school child, but more because they are harder to study thru the orthodox testing methods generally used.

The growth of the child from six or seven years on, is crammed full of interest and inspiration. To watch the growth of organization ability thru the spontaneous and unconscious effort is highly illuminating, almost mysterious. To watch the activities, the decisions, grow into habits which eventually form the movement of the brain and the autonomic system, gives one the feeling of security which comes from knowing what can be done with common everyday action. Action which we all must admit, which we all must know must be considered before any great good can come from what our experimentors do to find the course of human growth. So the age of the child from seven to adolescence is of particular interest because of its being so filled with desire to do, and desire to know, at home, abroad, all about everything the active curiosity calls forth.

The first seven years of the child's life is actuated by his love of play. No goal, all for himself often, just having an enjoyable time living. This does not seem to carry over in all of its force into the next period. Perhaps it is there in all of its force, but so many other things also are wanting attention that pure play can not be given all the time. The child wants to continue to play, but to play with some more or less remote goal to work toward. This could reasonably be called the "desire to form", continuing to emerge on another level, and with other characteristics. It is the desire to set a goal and to complete it so that it becomes a "thing" which has a reason for being. This is the art impulse, and the production of the unity is the art procedure. It is the art procedure which has its growth and calls for its needs to be satisfied in the years following play. It is in this period that satisfying the child's desire for knowledge which can be workably called curiosity, and his desire to do to a finished whole, to create, should demand the aim, attention and effort of the adult world. To see that environment would produce this satisfaction is the focal point of the energies of the mature. To be of intelligence keen enough, and insight sympathetic enough to stimulate is the great responsibility of all who call themselves mature. The child does not stop playing but he plays in form,—this produces the work of art.

What happens? His pictures take on more action, they still retain their organization, first things with supporting elements still continue to appear in their right relationships. The work will show the effect of the environment definitely. To an alert adult guide, with stimulation that encourages observation, awareness shows clearly. The child begins to be skill hungry also, and it is a sad condition which exists today, in the fact that so few of the teacher guides or the parent guides are adequate to the situation of showing the child how he may improve in his skills, in order that he may satisfy this need arising in him for the expression of his creative force, his spirit which wants to build and to build into rhythmical and balanced form. The average adult today is not able to help at this point, and the child is not competent with his own native ability to answer his cravings. What has so far been done at this juncture? In the third and fourth grade there has been an ever increasing number of facts, under the guise of knowledge, forced upon the child, thru the medium of words. Free expression in the picture has been dropped out, if it had ever been permitted to enter, and there is nothing left for the child but to endeavor to "get his lesson" of detached facts thru his mechanical memory

At this age in our system of the immediate past the opportunity to make use of these knowledges by forming them into relationships and thereby giving them a meaning which can be retained, has been given no

place. But by forming the facts into relationships the memory is stimulated and is of such a quality as to be thoroughly reliable. The habits for organization continue to form both in the muscles involved in the making of a picture or other expression, and thru them into the habits of thought. Consideration of existing facts and materials, selection and discarding, experimentation to find the best location for parts, finally completing with an ever improving technique the entire form, the satisfaction which emerges from the finished created form, cannot be over estimated in its importance at this stage. The entire life of a human being has been changed when he has discovered that he can "do something" himself, which is another way of saying that he has discovered that he is a human being.

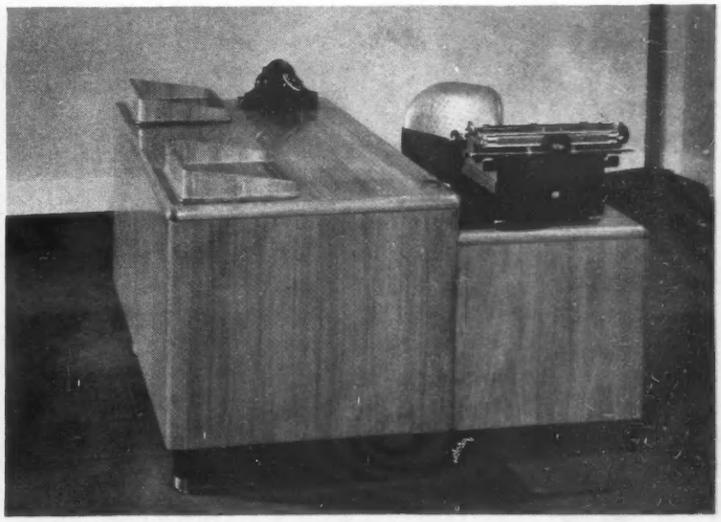
There is not much more to it than just this, that the child is guided in growth in every way particularly when he discovers that by directing his efforts, his muscular efforts toward bringing together materials into a rhythmical balanced form, that he is forming habits for being able to do whatever he desires. His desire is awakened, his attitude is one of construction. The urgent call for action by his body can be fully satisfied by gaining a control of it thru constructive use, and he discovers that this is as enjoyable as his play was at an earlier age, he can see how "work" can become enjoyable, how daily routine needs can be made as satisfying as the free expression needs.

When adolescence approaches, with its increases of knowledge desire, and its mechanical reproductive powers added, the muscular and neural body is already set to "take it". It has been developed thru constant and enjoyable repetition of getting the muscular and boney structure into a controlled order. Potential excesses of the new life will not affect the well-balanced structure. the various parts will work in harmony, because every muscle of the body inside and out, will have been brought under control by the long practice of doing all things in a rhythmical and balanced way.

Between approximately fourteen and twenty-one, there is no marked change, other than an increasing power to place knowledge (and materials) in ever more efficient more beautiful organizations. The individuality asserts itself in a controlled way, the character and personality reflect this action and the habits that result. During the pre-adolescent years there has been opportunity for the adult guide to notice any particular efficiency or deficiency the child has. These should not be in any sense unduly noticed outwardly in the elementary school child. As he enters his high school life, certain things which he has been able to do better than others should be remarked, and he should be encouraged to follow this up. If this is done his very definite gift or gifts will assert themselves and he will be the individual human being he was intended to be. If this development is started as a talent too early, it will in practically all cases cause a break down of the morale, because the nervous structure is not able to handle the exhibitionary element involved. If however, he is allowed to continue to be one of the group, with democratic ideals of equality uppermost, he will develop a broad base of abilities and a stable nervous system, which will allow him to attain heights

(Continued on Page 26)

An unusual window display for Jay Thorpe, a New York specialty shop. It was designed and executed by Domenico Mortellito, a noted American mural artist, who painted the design of platina foxes directly onto the window glass from the inside.



Research and modern production methods, have combined in the development of an entirely new idea in office desks, by the Studebaker Corporation. It is called the "Convertible", is streamlined in appearance and embodies all-purpose features which it was said have never before been available in office equipment.

The Pottery Market at Berne, Switzerland, is held yearly at the same time as the Annual Onion Market, giving Bernese housewives an opportunity to replenish their crockeries. Photo by F. Henn.

CERAMIC INDUSTRY IN SWITZERLAND

By MARIE WIDMER

Switzerland is not one of the pioneers in the ceramic industry, for ancient records tell us that the word ceramics is derived from Ceramos, son of Bacchus and Ariane, patron of certain quarters of Athens, famous for their pottery and tiles factories. After the Greeks came the Romans. Profiting from the experiences which their predecessors had made they spread their potteries throughout their vast colonies. But with the decline of the Roman Empire the art of pottery had a temporary setback.

However, as early as the beginning of the 17th century potters' workshops were found at and around Thun. Today this region with the two centres of Steffisburg and Heimberg, is noted for its fine and artistically painted potteries. Good clay is available in the neighborhood and every citizen is entitled to his share of the community's timber, so that the running of a small furnace does not present any particular problems.

While the goods turned out in private homes are mostly sold to the peasants on market days, factory products are exported all over the world. Old traditions and quaint patterns of long ago have retained their popularity in both groups and it happens quite often that some of the latest articles feature phrases such as this: "When you use this plate, remember that you, like the plate, are fashioned of clay."

It was Solomon Gessner, the Swiss poet and painter, who first suggested that Zurich should build a porcelain factory. Such an establishment was started at nearby Kilchberg in the year 1765, but it closed in less than one hundred years. Nevertheless, some of its products are on view in the Swiss National Museum at Zurich.

In 1781 two Germans founded a porcelain factory at Nyon on the lake of Geneva, but this enterprise, too, did not last very long, having to close down in 1850. Then there was a citizen in Lenzburg, Canton of Argovie, who also manufactured porcelain goods, adorning most of them with hunting scenes. However, having been refused a loan by the town of Lenzburg for

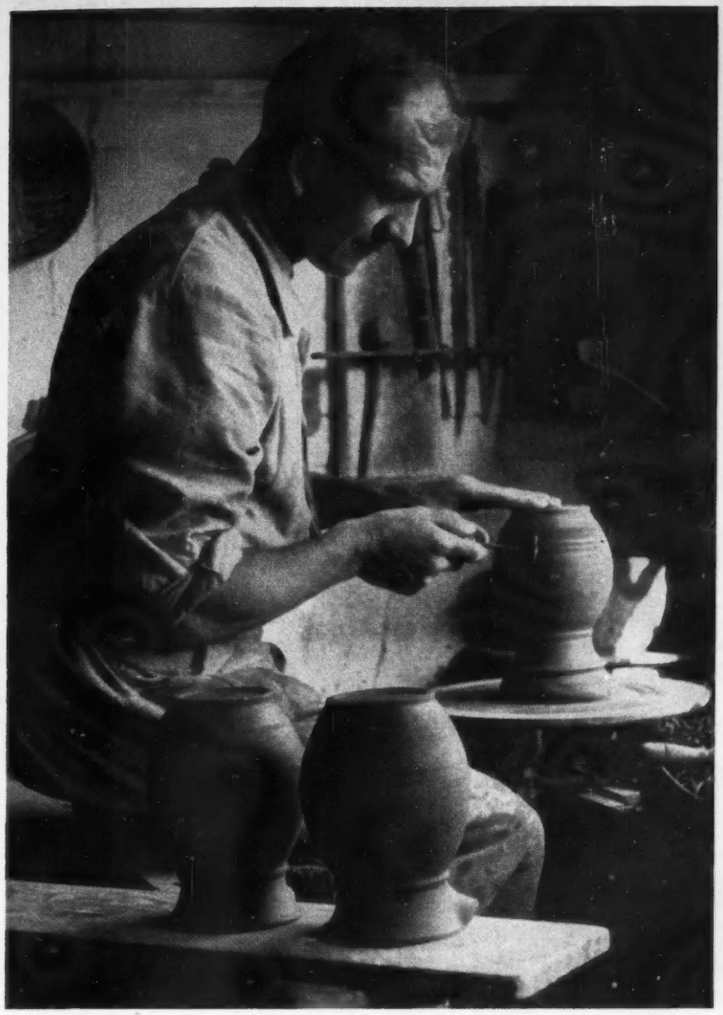


Photo by O. Stettler

A worker in a Pottery at Heimberg, near Thun

the erection of a factory, he soon saw himself obliged to discontinue his work.

For several decades Switzerland then remained without a porcelain industry of its own. Finally, in 1906, due to the initiative of Swiss porcelain and glass merchants, a factory was founded at Langenthal, canton of Berne, with actual work being started in 1908. Today Langenthal products enjoy an enviable reputation for their qualty and style with the hand painted variety being extremely popular with the refined classes.

In order to give proper training to workers and future foremen and managers in the ceramic industry the Swiss Ceramics School was founded at Chavannes-Renens near Lausanne in 1913, with the help of the Federal and Cantonal authorities. The school has a department for the instruction of turners and modellers, also one for decorators, moulders and modellers.

By constantly modernizing its equipment and improving instruction according to current needs the school at Chavannes has obtained very gratifying results. The course lasts three years and teaching is done by a highly trained staff. An exhibition of noteworthy articles produced by the pupils is arranged yearly in one of the large dry goods stores at Lausanne, these displays invariably showing perfect technique and beautiful designing. Pupils range in age from 15 - 18.

Pottery from Berne

In Switzerland the ceramic industry includes the following main branches: Tiles, Dutch bricks and fireclay products; pottery and slabs for stoves; glazed ware; stoneware; china.

The first and fourth groups manufacture almost exclusively for building and engineering purposes. The other branches also make similar articles, although most of the firms concentrate on tableware and crockery. The only Swiss porcelain factory is the before mentioned establishment at Langenthal. High tension electrical insulators are among its specialties.

Women painting pottery in the village of Heimberg, Switzerland

A small sampling of the assortment of objects juried by the students and arranged to indicate the better choices, A, on black backgrounds and less desirable choices, B, on gray backgrounds.

AN EXPERIMENT IN DESIGN KNOWLEDGE

By CLARA MacGOWAN
Associate Professor of Art
Northwestern University

The way to awaken and cultivate a feeling for and a knowledge of design is through direct visual and contactual experience. The basic and most effectual way is obviously in working with materials and mediums toward aesthetic ends. This is experience in creation itself. Another way and supplemental to this is to examine, analyze and evaluate objects **comparatively** for design values. This experience of comparative evaluation is also a basis for making judgments.

America is not a design-conscious nation, yet it is one of the most industrially inventive in the world. Curiously enough, its greatest achievements in design —in other than the fine art mediums of painting and sculpture—have been in large objects and structures as bridges, dams, factory buildings, grain elevators, airplanes, ships, trains and automobiles and such smaller mechanical units as refrigerators, typewriters and radios. There is an explanation for all this. The chief explanatory fact is that large things must almost always be built functionally and economically. The result is that either large things are in themselves creations of functionality and beauty or they are the first to have the influence of good design.

This is not to say that we haven't done some outstanding things in smaller objects. We have. During the period September 28-October 24, 1938, the American public was given an opportunity to see a selection of these in an exhibition of articles under the title "Useful Objects Under $5.00," assembled and displayed by the Museum of Modern Art, New York. These were remarkable products. America does have outstanding individual designers. But the products of these designers have not been widely accepted. There is consequently a great dearth of well-designed small objects.

In order, first, to give students in art classes at Northwestern University and, second, the general student body and the community, an opportunity to get at design values through comparative examination and evaluation, we carried out the following experiment. It is now an integral part of our art program.

The students in the beginning classes in Design were asked to bring any articles which cost a $1 or less. As it turned out, most of them cost less than 25c. We were limited to small articles as the glass showcases in Deering Library would not permit larger objects. The assortment of hundreds of items that were brought was nothing short of every kind of article in use in the average American home and rooms of university students. They constituted a good sampling of what Americans buy and value. They included such things as these: stationery, handkerchiefs, table napkins, compacts, powder boxes, combs, bowls, vases,

cups, pitchers, paper knives, bottle-openers, small picture frames, perfume bottles, forks, knives, spoons, teapots, shaving bowls, ash trays, ceramic figures, bookends, candlestick holders, pipes, cigarette cases, etc., etc.

These articles were to be grouped and paired, first, as related articles and, second, as to their design values in the sense of one being better than the other. This immediately raised the problem of criteria and standards for jurying the articles. Several class periods were devoted to this jurying, in which discussion and grouping and pairing took place and out of which the students established these four criteria for evaluating the design qualities of the articles:

1. **Suitability of the shape of the object to its use.**
2. **Fitness of the material used in the object to its shape and function.**
3. **Relation of the applied, incised or modelled design to the shape of the object.**
4. **Art quality (including color) of the motifs themselves, used as decorative material. Representations or imitations of things in nature are not suitable for use in design.**

Related articles were then grouped and paired. This grouping and pairing was done, to repeat, on the basis of one being better than the other for such and such reasons, as expressed in the four criteria. Article A or Group A, those that were better, was placed on black backgrounds and Article or Group B was placed on gray backgrounds in the showcases. It should be observed that because Article A and Group A were better than the other, this did not imply that Article A and Group A were the best examples, nor the other, the worst, of that type or group of articles, to be found in the country. The "better than" comparison in grouping and pairing was relative: it was the better and best or bad and worst of the assortment that we had assembled. The intent was not to discover the best designed articles of a given kind, nor the worst, but to indicate a basis for choice.

Beside each group or pair was a typewritten card, which set forth the reasons why A was a better choice or buy in terms of design and function, than B. All this, it must be remembered, was the work of the students themselves, who handled and evaluated each piece or item.

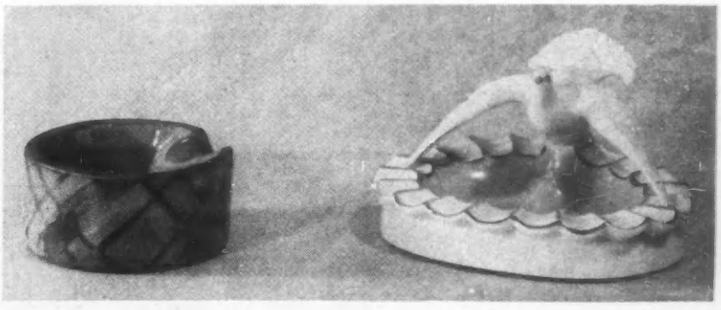
An examination of the photographs with their legends will reveal to the reader just how we proceeded. However, so that a rather complete idea can be had of comparative analyses of particular articles, I want to consider them briefly.

In Photograph I, on the left, may be seen the "A" article, a six inch plain pottery pitcher of average weight. It has a handle that makes it easy to hold when pouring out the liquid content. The **spout** functions well and the rich dark brown glaze inside and out satisfies the **need for covering** the basic porous material. This pitcher of simple shape is a good use of pottery designed to serve its purpose in a functional way. It satisfies very well criteria 1 and 2.

Pitchers Used in This Experiment

On the right is "B," an ornate eight inch pottery jug with a cover, much too heavy to handle comfortably with respect to its cubic capacity. The handle, really too short, is pieced out at the bottom with a small extra bracket-like piece of clay, which is completely non-functional. The spout pours poorly because it is too wide at the tip and not properly modelled to permit the liquid to flow freely over the edge. Here the material of pottery is not used as satisfactorily as in the design of pitcher "A." In this case, thus far, our analysis indicates that criteria 1 and 2 have not been attained.

In regard to the surface treatment of this pitcher and the applied modelled design, there is much to be desired. The ridged background is hard to clean and has no relation either to the shape or use of the pitcher. The clumsy scrolls and the naturalistic roses and leaves, poorly spaced on the sides and cover of the jug, are again unnecessary ornaments of the worst kind of design, competing with the ridged background and forming a "busy" restless decoration. This is an example of the misuse in this medium of an imitation of flowers and leaves as found in nature. They are in no way related to the shape and function of the object. The background is of a vivid yellow green glaze



Ash Trays

and the roses of a brilliant pink glaze, again compete with the ridges of the background, this time in color. The scrolls and leaves are of a darker green than the background. This jug, less functional, more gaudy and pretentious, is an example of a very poor choice in a pottery pitcher. It shows that criteria 3 and 4 also were not realized.

Two ash trays are contrasted in Photograph II. On the left, "A" is a pottery ash tray, made deep enough to prevent the ashes from blowing out easily. There is a groove for a cigarette on one side. This piece is glazed inside and out, so that it can be cleaned readily. This ash tray has a desirable substantial quality. The decoration consists of stripes, varying in width, of brown and red brown underglaze paint on the outside and the rich red orange color of the clay inside. The glaze on both sides is clear. This specimen satisfies all four criteria.

"B" on the right is a shallow ash tray of china with many grooves for cigarettes and with no consideration of the fact that the part made for ashes is entirely inadequate. The tips of the wings of the bird resting in two grooves create pockets for dirt to lodge. The inside of the tray is a vivid red and the outside white with cheap liquid gold lines. The naturalistic bird has no relation whatever to the function of the article. This ash tray fails to measure up to any of the points.

Photograph III has on the left a simple wood carved figure which expresses the medium and possesses compactness and unity. On the right is an elaborate cast iron figure with an abundance of meaningless design. In spite of the material, iron, the figure possesses less solidity and strength as sculpture than the wood example. The extravagant decoration emphasizes the lack of knowledge of the designer in figure construction as well as its adaptation to the material used.

After we had assembled the articles and during the discussions, preceding the jurying, we discovered such undesirable current practices as these, some of which may be seen in Photograph IV: the pressing of wood for picture frames to imitate hand carving, pasting pictures of realistic subjects on metal boxes and using a design made for one medium in another. A corn cob pipe, cheap and abundant as corn cobs are, happened to be a painted wooden pipe in the imitation of the genuine. Many white metal covered boxes had complicated designs in relief, all done by machine, in imitation of hand work of period designs. Numerous examples of glass and china bowls on feet, salt shakers, candlestick holders, etc. were unbalanced as they were without a well-placed center of gravity. Some cardboard powder boxes and wooden shaving bowls were hard to open.

This Exhibition which was held between Thanksgiving and Christmas was entitled "Art in Everyday Use: A Guide to Buyers." It was well publicized in our student and city newspapers. Every day during the exhibition period two students from the Design classes spent an hour or more discussing the choices, elaborating the meaning of design values or lack of them, and answering various points raised by visitors.

This exhibit of grouped and paired inexpensive articles provoked a storm of interest, discussion and alarm among the student body. Since Deering Library is a center of student life, hundreds of students saw it. Large numbers of them had definite tastes and knew with certainty what they liked; they were astonished to learn that their level of appreciation and knowledge of design was meagre and that their choices, most frequently, were objects on the gray backgrounds or the B groups. Not only were the students, however, stirred and interested, but this was also true of the faculty and people of Evanston. Many of them expressed their appreciation of this all-university and community event.

The educational value of this experiment is immediately evident. First, it provided the art students themselves with direct experience in examining and judging small objects in terms of design; second, it gave the general student body and the community an introduction to the logic of design as embodied in objects, not in words, and an opportunity to obtain a basis for choosing and buying better designed articles.

One of the greatest needs in Industrial America is a consumer education in the selection of everyday things. Our youth must be vitally trained in the basic concepts of the visual arts through direct experience, if we are to eliminate the enormous quantity of badly designed objects now being sold and to replace them with beautiful and functional items.

Two small figurines selected to serve the purposes of this experiment in design knowledge.

HISTORY OF TALLAHASSEE • A MURAL

A difficult task for many Art instructors is that of selecting and keeping sufficient material, in the way of subject matter, for the art class activities. Let them look around their communities; in their own "back yards" may be found plentiful "food" for art projects.

The accompanying photo shows an example of such a project, taken from the resources and background of the City of Tallahassee, the capitol of Florida. The art department of the Demonstration School of the Florida State College for Women has now completed a mural thirty-six feet long by six feet wide, depicting the history and growth of that city.

The project began with a discussion and study of the Mural as a form of art expression and was further supplemented and inspired by articles appearing in the DESIGN and other magazines. Through student contributions and class discussions of suitable themes, "The History and Development of Tallahassee" was chosen, as the city is especially rich in historic material.

A complete composition was drawn up first in miniature form and later transferred to the wall. Canvas was first adhered to the wall area so that the illustration might be preserved in case of remodelling.

During the unit of oil painting that followed, the students gained much from the varied experiences with that medium — organization, style, technics, color (mixing, harmony, etc.)—, and even though this project was inspired by local material and interests, it was carried on in a free, creative manner, with the guidance and timely aid of the instructor, so that the students profited immensely from this period of study and actual work on an absorbing and successful problem.

The photograph shows the students at work painting directly on the canvas covered wall. They are Doris Maige, Lula On Smith, Kathryn Sikes and Doris Jacoby.

A scoop for home-brewed beer, a dipper and spoons

KHOKHLOMA

By I. DMITRIEVSKY

AT ONE TIME ALL RUSSIA ATE AND DRANK FROM VESSELS OF KHOKHLOMA.

The big varnished wooden bowl decorated with an interlacing design of grasses and flowers is shot with flame and gold, relieved with black. The well-scrubbed table is laid with a skimmer, a salt-cellar, spoons and a dipper for home-brewed beer—all to correspond with the bowl. The peasant family sits down to dinner. The mother gets a big earthenware crock of sour-cabbage soup out of the stove and pours the boiling liquid into the bowl. They dip into it; the spoons do not lose their brightness or scald the mouth. The things are of Khokhloma wooden ware.

At one time all Russia ate and drank from vessels of this kind. The same could be found, mounted in gold and silver, on the tables of the tsars and the nobles. Every foot-traveller carried a Khokhloma spoon sticking out of the leg of his high boot and a bowl in his wallet, soldiers got them out of their satchels as they gathered 'round the big cauldron in camp. Bashkirs and Kirghiz drank their favourite beverage—fermented mare's milk—from Khokhloma cups.

When the Empress Eugenie received guests in Paris, their visiting cards were kept in a big Khokhloma bowl. The conquered Emir of Bokhara offered Lessar, the tsar's emissary, pilau of rice and mutton in a similar bowl. Russian travellers encountered the familiar painted vessels in Iran, India, and Afghanistan. At international exhibitions they gleamed beside Chinese and Japanese lacquer, and did not suffer by comparison, for their workmanship was irreproachable, their durability undoubted, and their colouring and gloss finer than that of their neighbours.

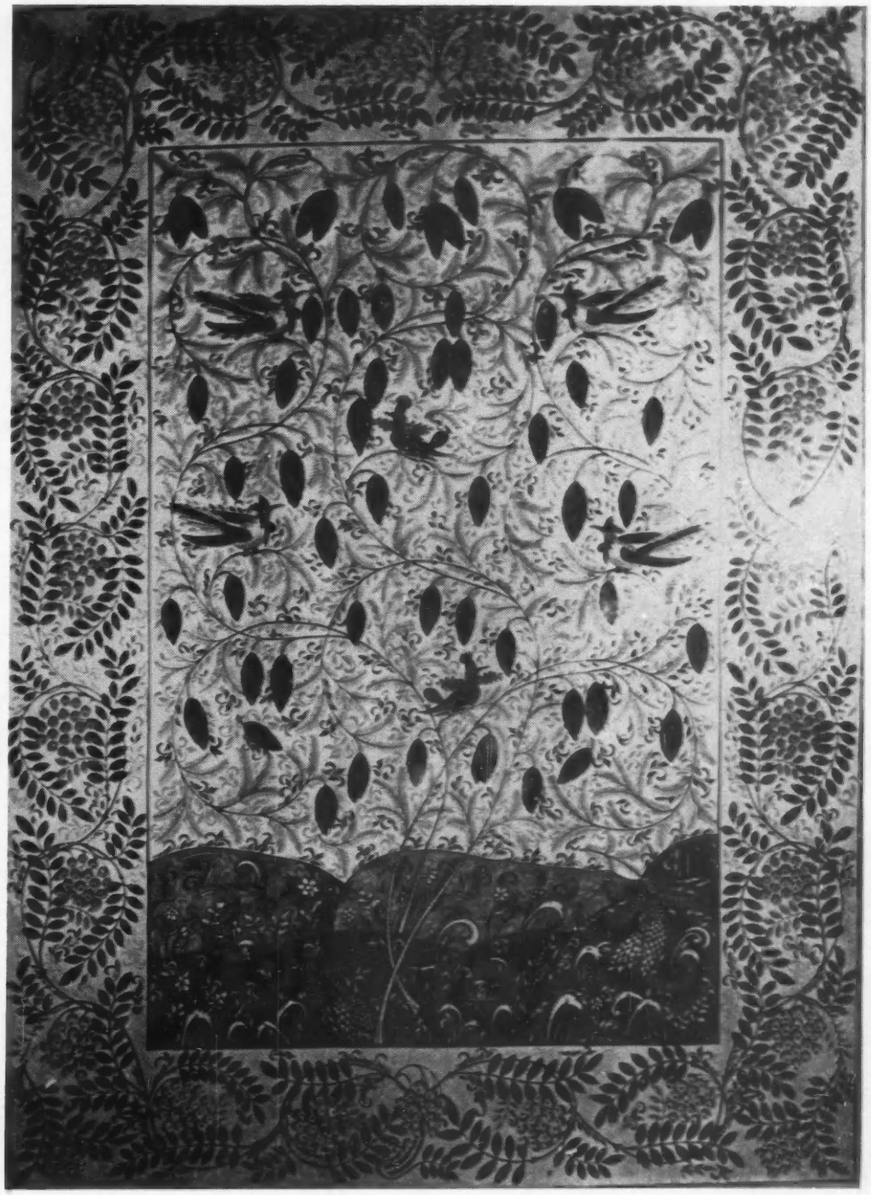
Who were the craftsmen responsible for these things? Where was this Khokhloma?

Along the country lanes of Russia many years ago it was no uncommon sight to see, in summer time, a one-horse cart with charred shafts and a load of beggars, young and old. They wandered about the villages telling of their misfortunes, and of homes burnt down in the trans-Volga woods bordering the Vetluga and Kershenetz rivers. Few believed their tales but none refused them bread. Those to whom it was an unfamiliar sight were informed—"It's all a yarn about their homes being burned down! Those are the spoon-makers from Khokhloma. The soil is nothing but sand in the woods where they live; you can't grow grain in sand. So in winter time they paint spoons and the like, and in summer they go a-begging. It isn't fire that's been their ruin, it's their trade. And many of them die of hunger."

The men of Khokhloma, Byezdelya, Khriashchi, Dianovo and other villages of what was formerly the Nijni-Novgorod gubernia (government), and is now called the Gorki Region, made spoons, scoops and skimmers, and the women and girls decorated them with beautiful designs and varnished them. The door of every house was covered with dabs of paint, the walls were impregnated with oil and the air with a bluish vapour that made the eyes smart; it came from behind the iron doors of the big stoves. The women, with their sleeves rolled up to the elbows, prepared and painted the spoons: some covered them with a mixture of flour, chalk and light-coloured clay, others rubbed them with cloths, a third group, armed with goose-quills, outlined in red and black designs of grasses and flowers, churches and palaces, ladies with neat bouquets, and strange cities. After every new operation the spoons were stood on a big frame-work of bars and plunged into the stove in hundreds. There they were baked in a moderately slow oven for half the year till the drying-oil mixed with white lead were thoroughly assimilated. This was the famous Khokhloma lacquer that resisted the action of boiling water, acid, etc. The whole secret of its durability was in its firing.

The eyes of the craftswomen were red-rimmed and had dark circles under them. As they worked they sang:

A Sugar Bowl



A Painted Panel by Artist Byedin

"Painting spoons and varnishing,
Singing though I weep.
If there's beer, 'twill bring us cheer,
Then let us drink it deep!"

In the summer time 170 million spoons, mountains of bowls and dippers, went up and down the Volga on the barges, while the artists who had painted them went begging in carts supplied by the merchants in part payment for the goods. Haste and the hard conditions of work began to leave their mark on the ancient designs. Handed down from refugee Old Believers who had been ikon-painters, the patterns degenerated, lost their liveliness and variety and kept in the one dull groove. The country of the spoon-painters appeared to be doomed. At the beginning of the century the secret was known to two families only. During the war of 1914-1918 the Khokhloma beggars disappeared; the craftsmen had apparently died out.

Then suddenly shop-windows, exhibitions and museums in the U.S.S.R. and foreign countries showed a variety of lacquered wooden articles decorated with designs in fiery, telling colours; there were scoops and dippers in the form of dragons, birds, giants of old; goblets, bowls, vases, barrels, trays, furniture, panels and so on. And as one looked at them it seemed that

the devitalized patterns of the Khokhloma grasses had taken new life and flourished once more in vigorous stems and curling tendrils, bore luxuriant blooms, clusters of grapes, rowan-berries, and apples. And all this rich new growth interwove and swayed in the wind, alive with birds that carolled of the joy of life. Connoisseurs who admired these things could distinguish the handiwork of the master-craftsmen who had escaped the fate of the unknown spoon-painters. These were Feodor Krasilnikov and his pupils, Yuzikov, Umnova, Kuznetsova and others. The head of the new school of Khokhloma artists and the organizer of the studios, was Feodor Krasilnikov.

In 1930 he organized the first workshop in the village of Byezdely. It united 35 artists. The village people had long since given up painting, but the organizer succeeded in finding craftsmen.

Once he happened to see a young shepherd drawing a design in mud on his stick. The lad became the thirty-fifth craftsman in the artel and ultimately one of the best in the district.

On the pattern of this first workshop Feodor founded others in the villages. It was due to Krasilnikov's initiative that the craft revived. In 1933 he became the head of the handicraft studios in Gorki (Nijni-Novgorod).

In 1937 he and his pupil F. F. Byedin built a model studio in the village of Novo-Pokrovsky. It is situated on the edge of a wood looking over a mirror-like lake. In the ten spacious, well-lighted workshops there is no sign of the unwholesome vapour of the olden days, and the place smells of freshly-planed and turned wood and finely-powdered colours. In every department from the wood-drying, to the painting there are piles of wooden vessels, furniture, ornaments, in various stages of preparation under the hands of unhurried people who love their work.

In the sizing-room everything is white: the aprons of the women, the vats of a solution of whitish-pink clay with which they smear the best goods, that is, those that are made of well-dried wood without any knots or blemishes. After being dried on trays with high bars, these things pass through the deft hands that give them a thin coat of linseed oil and send them to be dried once more in the oven. Then the roughnesses left by the clay and oil are polished off and another furnace heated to a temperature of 70°, swallows them up. After more polishing with sheepskin, the cracks and traces of the coatings are filled in with clay mixed with oil, the things are once more dried and then given another polishing. In the firing department the sizing is reinforced by four coatings of drying-oil that has been cooked in a stove for six months, and the things are dried four times. Then the furnace receives them for a final firing and they emerge with the coating that is ready to receive the colours, and will preserve them in all their freshness and brightness.

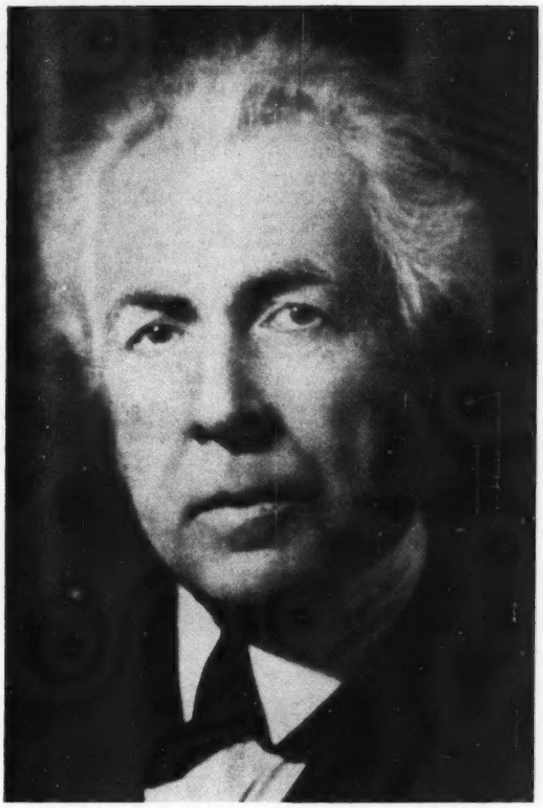
People in linen aprons enamel the wood with a mixture of finely-powdered tin and glue and the silvery piles are borne away to the design room.

The play of colour in this light room dazzles the eye. Here we are met by F. F. Byedin, a man of fifty, who was a copyist in his youth, but now produces the original designs that are taken as models. A group of young artists are being trained by him.

A lively young man called Pashka Krasilnikov is sitting at a low table painting a coffee-table. He has just laid out on his board a card with his design, an intricate interlacing of leaves and stems. The outlines have been pricked. He sprinkles the surface with powdered cinnabar, rubs it into the design, and then removes the cardboard; red dotted lines remain on the tinned surface of the table. Then Pashka's brush moves swiftly, curving, writhing like a live thing, swallowing up the red dots with an oily, gleaming line of soot. Fiery cinnabar is painted over the tinning and silver leaves stand out against the vermilion background.

Small articles are done free-hand, beginning with any colour. Nadya Muravieva holds a tinned barrel in her left hand while she paints curling grasses on it. She is making up the design as she goes along. Suddenly she finds she has an empty space in the shining silver field. It has to be filled in with something. She ponders a moment, then the brush sweeps on and the silhouette of a bird darts out of the swaying stems. The girl's hand is light and firm, her eye admires her work.

In the varnishing room colours must be protected by five layers of durable lacquer; while unpainted, but tinned places on articles glisten like gold under their varnish. But here not all the articles share the same fate. They are divided into two groups: one flames in vermilion and chrome, picked out with black, Byedin, having decided that the colours are properly dry, gives directions for them to be put in the stove. For the other group, where aquamarine, emerald and violet, predominate he prescribes "cold varnishing", and explains to the visitors: "Cold colours like blue and green and violet can't stand the fire. They fade in it. But cold varnishing preserves their colour and shine. The old warm Khokhloma colours—vermilion, chrome and black—are akin to the fire itself and they come out of the stove still brighter, as though beautified by the flames."



FRANK LLOYD WRIGHT

A LEADER IN AMERICAN ART

Generally considered the world's greatest living architect, Frank Lloyd Wright has certainly been its most influential one. His revolutionary ideas of house planning and architectural form have penetrated to almost all parts of the civilized world. Countries as remote as Holland and Japan count him a major force in the development of their contemporary styles. He has actually built in thirty-one States in the country, and there is perhaps not a single State which does not show a number of buildings dominated by his influence.

In addition to the architectural models, the exhibition will show actual full-size details of special structural features invented by Wright. There will be drawings and architectural plans made by Wright fifty years ago, long since realized in buildings which have exerted a powerful influence on world architecture. There will be still other designs which are as yet only projected in the fertile brain of this great architect. The large black-and-white photographs, some color transparencies, and a color motion picture will give the average visitor, to whom architectural plans are somewhat of a mystery, a more easily realized view of Wright's tremendously diverse work: the house built over a waterfall at Bear Run, Pennsylvania, remarkable not only in architectural beauty and suitability to site but as a brilliant engineering feat; the great hotel Wright built in Tokyo in 1916, the only large building in that city to come through undamaged by the terrible earthquake of 1924; a permanent desert camp built of stone, wood and canvas near Phoenix, Arizona; pierced concrete block houses in California; and many other examples of his architectural genius and originality.

For Frank Lloyd Wright, architecture is not only a design for building but almost a design for life. Near Madison, Wisconsin, he has over a long period of years developed a workshop-school-home community which he calls Taliesin, a Welsh word meaning "shining brow." It is composed of sixty or more people—Mr. Wright, his wife and daughters, apprentices, students, workers who live, work, farm, study, play and engage in all the activities of a town within itself. They are all disciples of Wright, the philosopher, as well as advocates of his architecture. Some live with the Wrights in Taliesin itself, a wide-spreading house which with its courtyards crowns the brow of the hill; others live a quarter of a mile away, across the fields in another rambling group of structures—houses, workshop, studios, offices and a small theatre.

The buildings at Taliesin seem to grow naturally and inevitably out of their surroundings. Wright never fights or disturbs nature but works in a friendly conspiracy with it, making his buildings harmonize with their setting, or complement it sympathetically. Wright allowed his hilltop in Wisconsin to keep its natural rolling form and built in such accord with its age-old contours that Taliesin seems to merge with the earth, to grow out of it organically rather than to be set upon it arbitrarily.

Wright was born in Richland Center, Wisconsin, in 1869. His father a Baptist clergyman from Connecticut, more interested in music than in preaching, his mother the daughter of a Welsh Unitarian, early settled in the rich farm lands of Wisconsin. Their son attended the State University in Madison briefly. He wanted to be an architect but as there was no architectural school at the University of Wisconsin he studied engineering and acquired practical experience working on buildings of the university under the dean of the engineering school. He also studied the history and criticism of art and archaeology. In this way he approached his architectural career from two opposite points of view: the practical and the esthetic.

In 1897 Wright left the University of Wisconsin and went to Chicago. After a year with another architect he entered the offices of Adler and Sullivan, at that

time the best place in the world to learn architecture not as a tradition but as a modern practical profession. It was Louis Sullivan who created a new style of architecture for skyscrapers. In the office of this truly great American architect whom Wright still calls his "lieber Meister," Wright soon achieved a position of importance as a designer. Sullivan was not interested in building houses. Most of the domestic work which came to the firm fell to Wright. He built fifteen houses before he left the firm in 1894 to establish his own office.

Wright first became known as the architect of a new type of suburban houses which were called "prairie architecture" chiefly because the region around Chicago was the only section of the United States that had the courage to patronize an original and thoroughly American architect at a time when the rest of the country was insisting on European imitations. Even in his early houses, Wright had the courage to throw tradition to the winds and build in an entirely new fashion. They are all distinguished by a kind of design which he originated—new both in exterior and interior treatment. His interiors are not composed of separate rooms but are treated as single, flowing spaces only partly divided. His walls are intersecting planes gathered beneath a covering of wide-eaved, low-pitched roofs. His windows form continuous bands that often run the full length of the house.

Wright was a pioneer in the use of new materials or materials that had not been considered suited to the uses to which he put them. He created for these new or unusual materials types of structural expression and even ornamental detail which were so logical as to appear wholly fresh and startling. He was the first to make use of reinforced concrete in monumental architecture. In the 1920's, working in the Southwest, he developed a novel type of construction—precast concrete blocks with reinforcement in the joints. His recent Johnson Building in Racine, Wisconsin, has soaring concrete columns, thirty-five feet high yet only five inches in diameter at the base; the tops spread out like mushrooms.

Now at the age of seventy-one Wright is still experimenting far in the vanguard and every year produces architecture with the creative freshness and originality of perennial youth. European architects of three decades ago whose work was greatly influenced by their tremendous admiration of Wright at that time are now among the older generation. Several new generations have been inspired and taught by Wright since his early recognition. And when he arrived in New York yesterday (Sunday, November 10) he was accompanied by the youngest generation of his architectural disciples who built the models and are helping the Master install the exhibition which will do honor to a great and living prophet in his own time and country.

GLASS MURALS BY JOEP NICOLAS

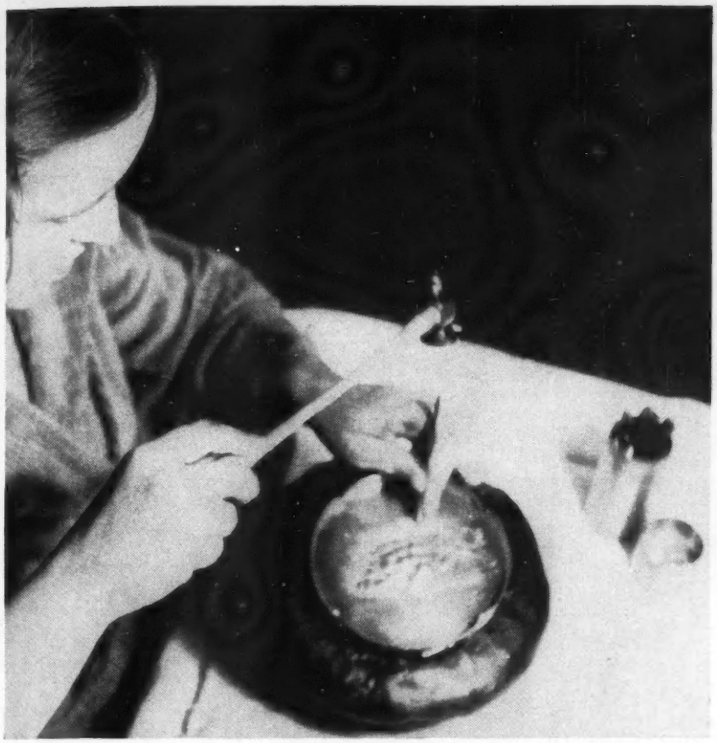
An unfamiliar art form — glass murals — was recently brought to the attention of New Yorkers for the first time in an exhibit of the work of Joep Nicolas, well-known Dutch artist who developed the technique, to open at Holland House. While the colorful panels of mural glass and examples of stained glass — glass-work has been the Nicolas family tradition for three generations—will make up the bulk of the show, it will also include paintings by Mr. Nicolas and sculptures by his Wife, Suzanne Nicolas.

Mr. Nicolas' work is well known on the Continent. In 1925 he won a Grand Prize in the International Fair at Paris and was similarly honored at the Milan Exposition in 1933. Leopold of Belgium decorated him with the Order of the Crown of Belgium, but the artist is far prouder that the king chose him to execute the stained glass windows in the chapel of the royal hunting lodge in the Ardennes. Queen Wilhelmina of the Netherlands conferred upon him the Order of the Orange Nassau and two of Holland's finest churches boast Nicolas windows.

Aldous Huxley wrote recently of Nicolas: "The fairy godmother who dropped into his cradle the gift of doing easily whatever he might choose to set his hand to, dropped also gifts of taste and sound composition, together with that knack for telling a story in pictorial terms, which was so contemptuously looked down on by the abstraction-mongers." Mr. Huxley points out that he has achieved a technical mastery of stained glass making "such as few artists possess. As a painter, he has shown his easy power in landscapes no less than portraiture: in oils and above all, in gouache on a rough, absorbent paper that imposes a technique quite unlike that ordinarily employed by those who use this medium."

Joep Nicolas was born in 1898 in Roermond, Holland. Educated to follow the profession of the law, he was halted in the midst of his legal career by the first World War. Serving with his countrymen in the army, the young man found release from the experience in the practice of his old hobby, painting. While still in the army he won the Vigelius Prize, awarded every nine years for the outstanding piece of Dutch art done during that period. At the end of the war, instead of returning to the law, Joep Nicolas went back to his father's stained glass studio. Experimenting with the old secrets of the craft, he evolved new processes.

The result of his work in glass was the development of "mural glass", in which the design is painted and fired-in between two layers of specially-treated glass. Richly imaginative, sometimes whimsical, sometimes allegorical, sometimes simply decorative, his work has been called that of a man of the new Renaissance. Mr. Nicolas has already taken out his first citizenship papers, so that there is every chance that America will see more and more examples of his work in this country.



A Craftsman Working at the Process of Making Repousse

REPOUSSE IS AN ANCIENT ART

By ALINE ZIEBELL SCHUTT

Have you ever wondered why the silver pieces on the dinner table of your hostess were not equally beautiful? The answer lies most probably in the fact that the more handsome pieces were chased or repousse silver. Repousse is a word derived from the French meaning, "driven back", that is to say, it is a decoration of metal by means of driving back parts of that metal and raising others so that the design stands out in relief. This art reaches back in man's history to the Assyrians, Phoenicians, and other oriental people. It came to Europe by way of the Greeks and Romans and was practiced without interruption to the Middle Ages with metal of all kinds.

Benvenuto Cellini, 1500 — 1570, is probably the best known of the European artists, although by this time the medium was confined to gold and silver. In his autobiography he writes without modesty of his early beginning. Cellini's pieces may still be seen in Italy, among the better known ones are: a statue of Christ in the Pitti palace, Perseus in Florence, and a cup known as Cellini's Cup.

Today the art of repousse is still practiced widely by the commercial houses dealing in silver flatware and hollow ware. The technique has changed little for it is an art which can not be mechanized. This is the reason why chased or repousse silver brings higher prices than others.

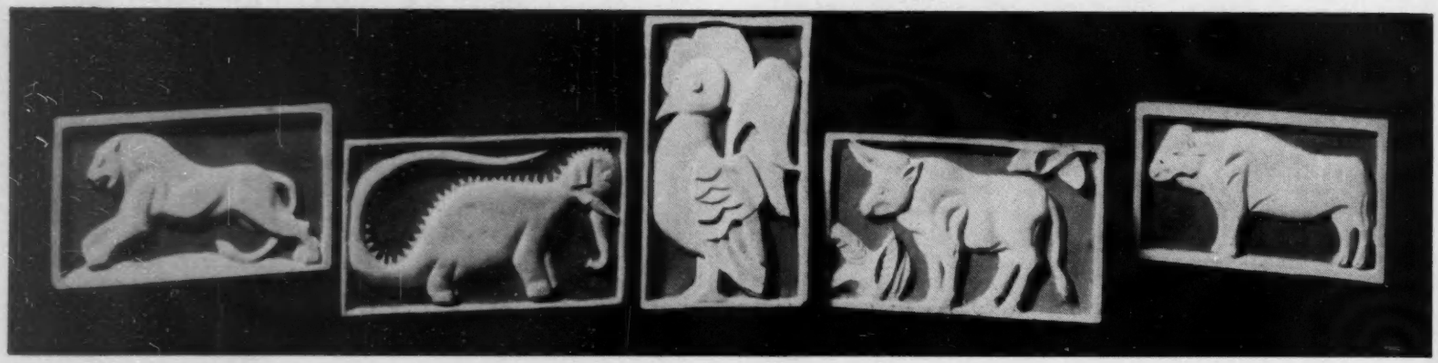
The metal which is to be chased is annealed, that is, it is heated to a degree which will render it pliable. Then it is cleaned and the design is transferred to the metal and scratched on so it will not be obliterated during the chasing process. The reverse side is oiled slightly to prevent its sticking when it is removed from the pitch block.

The pitch block, broadly speaking, is an iron bowl in which has been poured a combination of pitch and other ingredients. To all appearances it is wholly pitch which is heated to the consistency of bread dough so it can be shaped easily to support the metal; the metal is put on it and both are cooled thoroughly. The bowl is placed on a small sand bag to prevent tipping. Wood was first used, but pitch is more easily molded and can be used repeatedly.

A chasing hammer, similar to the carpenter's hammer, and chasing tools are the remaining tools used for bringing into relief the design to be chased. Chasing tools are made of tool steel, a high grade of steel, of varying thicknesses, forged and filed to desired shapes. One end is hardened and tempered to prevent its changing in shape with constant use; the other end is left soft or annealed so that the surface of the chasing hammer is not marred. These chasing tools may be bought, varying in price from about seventy-five cents to two dollars, or may be made for the price of the tool steel which rarely exceeds fifteen cents a piece.

The chaser holds the chasing tool with the left hand at right angles to the metal and taps the other end of the tool with the chasing manner, following the lines of the design. As the work progresses, the metal is reversed on the pitch block from time to time to permit modeling and annealing, for metal cracks when it becomes hard and brittle through constant pounding. An expert chaser has several thousand chasing tools in his collection and his ability to choose the right tools for the work depends on his talent and his training. The latter requires years of diligent work and only a few of the many apprentices who start out, actually become master craftsmen in the art of chasing.

The illustration here shows a small dish on the pitch block in the process of being chased. The design was raised in the manner described and has the appearance of depth or perspective solely because the metal has many levels. The shading helps define these levels and is produced artificially quickly by dipping the finished piece in a solution of sulphur and then rubbing the high spots with the palm of the hand and silver polish. This oxidation or tarnish, in common parlance, would appear in time of its own accord, but chased silver is so enhanced by high lights, that the silver smith always oxidizes his pieces immediately upon completion in order that the public sees the pieces in their most beautiful form. Sometimes a fine film of wax or lacquer is applied after oxidation to prevent the air from further oxidizing the silver and eventually turning it black.



A Group of Relief Plaster Carvings by the Students of the Empire Junior High School of Cleveland, Ohio.

CARVING TECHNICS FOR JUNIOR HIGH SCHOOLS

By RONALD DAY

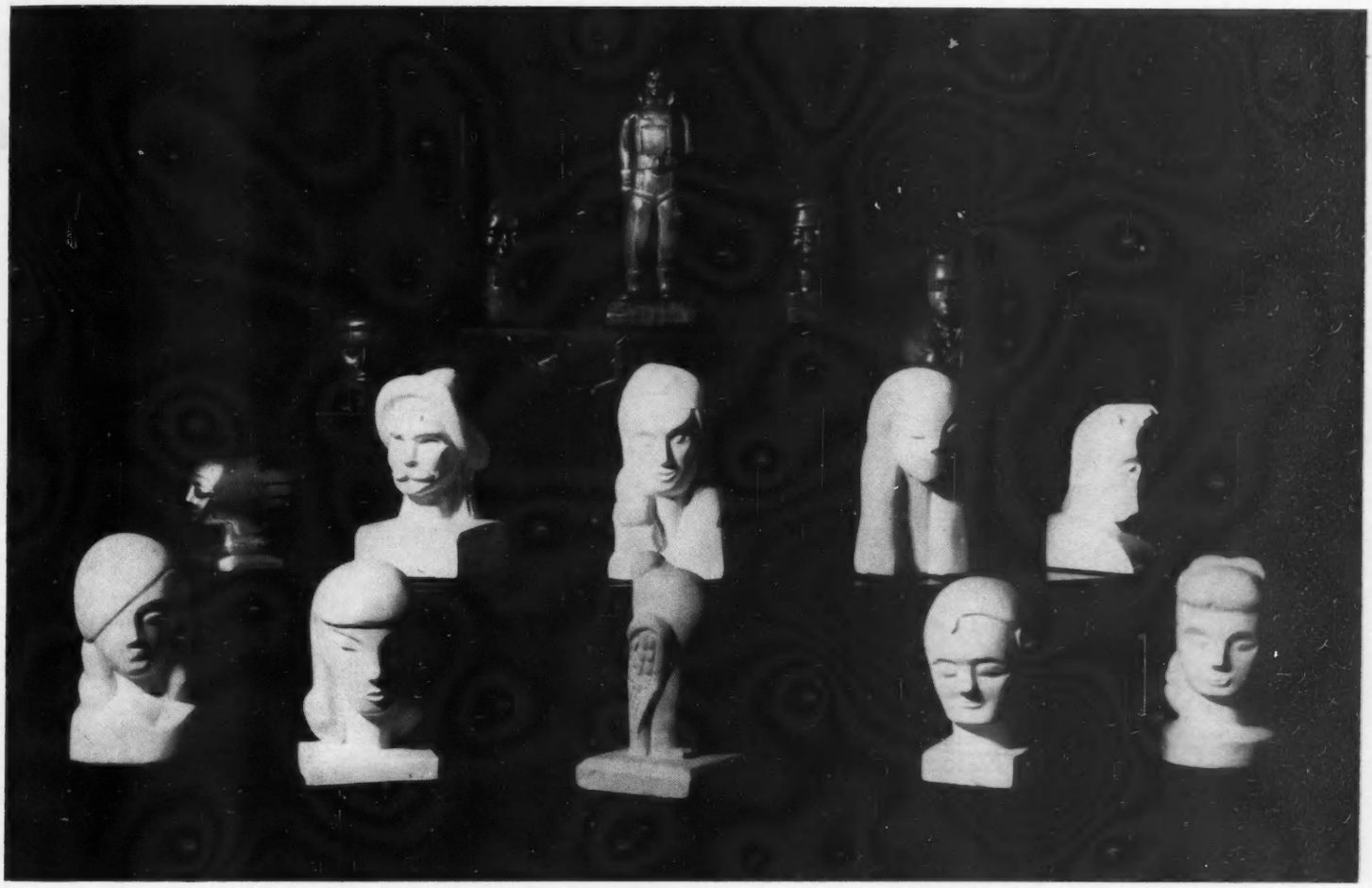
Empire Junior High School, Cleveland, Ohio

An appreciation and understanding of the materials with which a student works is an important factor in determining his attitude towards the problem. The beauty of the surface of fine paper, the beauty of the grain of wood, and the beauty of the simple shadow on a plaster sphere are as emotionally satisfying to the sensitive person as fine music and color. When a student senses this beauty of surface there is little danger of his making an over elaborate carving. He does not question the omission of detail and the stress on sheer simplicity of form and abstract expression. His desire to carve realistically and in detail is subordinated to his desire to carve so as to produce a product that retains the innate beauty of the material itself. Then, too an object carved is an object handled. Its appreciation is not entirely visual, but also tactile. The emotional and sensual thrill of the handling of a highly simplified carving in wood which has been waxed to a perfect finish prompts the elimination of superfluous detail. The desire for abstraction and simplification comes from within the pupil, not presented as a law or requirement. One pupil said, "A man without sight would like that carving, for it feels so nice." So we made our carvings so that we would want to pick them up, to touch them, and to leave the beauty of the material apparent. Who wants to handle and carve, to wax and polish a creation that has many points and much detail? Our interest in simplicity was purely selfish, for we wanted our work of art, with its permanence, so that we might enjoy it to its fullest extent, visually, tactually, and emotionally.

We started out with a problem in carving a low relief, either in wood as decorative pins, or in plaster as decorative plaques. A trip to the nearby cultural gardens proved an incentive for carving in low relief, for we were fortunate enough to visit the Czechoslovakian Garden while workmen were actually carving in stone in low relief. This visit gave us a knowledge of the process of carving, and supplemented with slides from the Cleveland Museum of Art gave us adequate background for our problem. Slides of Egyptian, Assyrian, Greecian, Roman and contemporary low relief showed us how other artists worked in this medium.

Animals were the favorite subject matter for these plaques. Some of the students created entirely unique animals by combining two animals. One girl combined a dinosaur and an elephant. Others conventionalized the muscles of the animals into an organized and consistent decoration. No attempt was made to enforce any particular type of design on the student after he was exposed to the slides and to the actual carvings in the cultural gardens.

A pleasing display of Wood and Plaster Carvings by the students of the Empire Junior High School of Cleveland, Ohio. The photographs of this article were taken by Colburn Ball.



The second step in the development of carving in our project was carving in the round. Plaster and wood were chosen as our mediums. Here again a visit to the cultural gardens proved inspiring because of the many finely carved heads cast in bronze which decorate the gardens. The simplification of form and the treatment of hair were especially noted. Some of the students seemed able to comprehend the third dimension best by first carving an egg shape and developing their decorative head from that, while others found it easier to work entirely by silhouettes, cutting first the side silhouette, then the front and back, and rounding the corners off afterward. Either procedure is satisfactory, the one used depending on the personality of the individual student. A knife and sandpaper were the tools used for the plaster. Those who carved in wood used gumwood, a fine grained, easily carved wood, which takes a soft-lustre finish when waxed.

You might ask, "Why not use clay, surely a more plastic medium?" But our aim was to make a carving, not of motion or action, but one having the same immemorial quality of the Egyptian carvings. A glaze would have destroyed our carving, and a too plastic medium would have defeated our aim, since our object was to develop an understanding of the broad simplicity and well defined planes so evident in great sculpture.

Place card done by silk screen process by students at the School of Industrial Art, New York City.

SILK SCREEN PRINTING

By J. I. BIEGELEISEN

There is hardly a printing method known today that can compare to the recently-perfected silk screen process in versatility, low cost of equipment and maintenance, and variety of printing effects. Let us see why. Most graphic arts are especially adapted to print on one kind of material, and it would be folly for example to insist on getting good prints on glass with the use of a wood or linoleum block. Linoleum block printing, letterpress printing, lithography,—each art has its own decided limitations in the kind of surface upon which it can print and in the kind of inks or colors that can be used. Silk screen is least girdled by such limitations. This unique method makes it possible,—nay easy, to print on glass, wood, cardboard, paper or cloth,—in fact on any flat surface that would be enhanced by a decoration or design. How many are the uses that welcome such a process! You can print your own colorful greeting cards, posters, signs, tea trays and mats, transparent lampshades, school visual aids, and textiles. Surely your own imagination can supply many additions to this practically endless list.

If your appetite has been whetted by the apparent magic of this new craft, and you would like to try your hand at decorating by silk screen, it will help to know the underlying principle of this process. Silk screen printing is based on the principle of the stencil. You are undoubtedly familiar with two types of stencils: the kind that house painters use for wall decorations, as well as the stencil used for printing instructions or addresses on shipping cases. These stencils involve the masking out of certain areas by a pattern in order to make those areas impervious to paint, and allowing open portions for the penetration of the paint.

Silk screen printing works on the principle that the mesh of silk is porous and will allow fluid to penetrate. Special stencil silk, known as bolting cloth, is stretched and tacked on a frame in much the same manner as an artist's canvas on an easel. This frame serves the double purpose of providing a reservoir for paint and a means of keeping the silk stretched taut. Now if you place a white card underneath this "silk screen," and scrape some red paint across the silk with the squeegee you will find that the paint passes through the silk and turns your white card into a red one. If, on the other hand, you block or mask out a part of the silk screen, and then scrape some red paint across it, you find that the white card remains white under the area of blocked-out silk. The process of silk screen printing is simply that of preparing the silk screen in such a manner that certain parts are left open (for penetration of paint), and others are masked out.

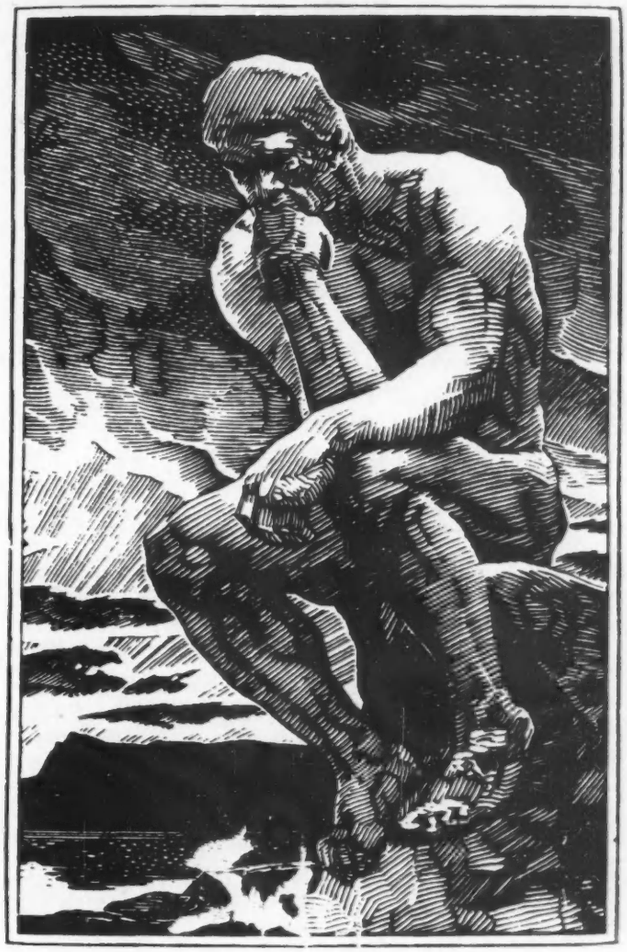
Among the masking mediums used are liquid glue, shellac, lacquer, paper, tusche, or a special lacquer film. Each plays its own part in producing an individual effect, and the desired effect determines the choice of medium. In an article of this nature it is not possible to include more than a discussion of the **principle** of silk screen. For a full treatment of this subject, refer to the author's other books.

It was stated at the outset that the silk screen process is versatile, and we have tried to prove this by showing that its uses are numberless, and its stencil-making methods varied. In addition, it offers a wide choice not only in printing surfaces, but also in printing mediums. The printing medium, i. e., the color or paint to be used for printing, depends upon the surface to be printed. For instance, for outdoor posters or signs, waterproof Japan colors are best. For textiles you might use special waterproof and dry-clean proof lacquers. There are occasions when you might prefer the brilliance of tempera colors, or you might want to decide between transparent or 100% opaque colors. You will get beautiful results with all mediums, and you may have your choice. Since there is no guesswork in the "registration" of one color in relation to the other, it is as easy to print a job of five or six colors as one with only one color.

This already seems almost too good to be true, and we have only just begun. About how many copies can be printed from the same stencil? As far as this is concerned, there is no need to worry that your stencil will "give out" before you have finished printing, for the stencil when properly treated, will last for thousands of prints. Go ahead and print as many copies as you like.

From all that has been said about the possibilities of silk screen, one might imagine that this process involves much in the way of expensive equipment. You may be surprised and delighted to learn that the silk screen equipment necessary for non-professional work now comes in as compact a unit as a portable typewriter, and costs far less. The professionally-designed Universal stencil unit consists of a stencil frame, silk, squeegee, tools, and paint, etc. complete with a carrying case, and can now be had at slightly above $10. Remembering that this small investment represents a permanent working equipment, besides the occasional replacement of paint, the economy feature of silk screen printing unit is simple and safe to operate. The small stencil knife is the only cutting tool used, and its tiny blade does not present any particular hazards. Indeed, it is safer in the hands of a child than the scissors used for cutting paper dolls. The skill which is required for turning out clean-looking, imperfection-free prints will come with a little experience.

The many advantages and few limitations of silk screen have caused it to be used not only as a home craft and hobby, but also in commercial advertising, textile printing, furniture decorating, lamp-shade work, and in the application of designs or lettering on glass, cork, and leather, etc. It has spread to the realm of the fine arts, fine silk screen prints suitable for framing. Another recent development makes it easy to use silk screen to reproduce photographic halftones and Ben Day work.



A Good Example of Silk Screen Printing

Thus the silk screen process provides a fertile field for further exploration. Its many advantages are compelling factors in recruiting those who are constantly in search of new field for artistic articulation.

THE PRESIDENT'S ART WEEK EXHIBIT

President Roosevelt's interest in National Art Week was reflected in the following objects selected from many States for the White House exhibition. Viewed from left to right: Bronze "The Tired Shopper" by Dorothea Greenbaum, Washington, D. C. A Pewter Bowl, by Myrtle La Pidus, Wis. Mule Head Bookends, by Gary Owle, Cherokee Reservation, N. C. A Ceramic Jar—Gray, by Laura Anderson, Saratoga Springs, N. Y. A Ceramic Bowl —tan with gold stripe design, by San Juan, New Mexico. Oxen and Sled with Logs, from the League of New Hampshire Arts and Crafts, Concord, N. H. Oil painting, "Singing Cowboys," by Manuel Bromberg, Iowa. Dry Point and Aquatint, "Penitent Fires," by Kloss, New Mexico. Tempera "Valley," by Richard Jansen, Wis. Wailulu Angora Wool Knitted Booties, Manchester, Vermont.

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CRAFT INSTRUCTIONAL FILMS

A series of six new instructional films dealing with handicrafts is now available from the Garrison Film Distributors, Inc. of New York. The Films have been produced in operation with the Universal School Handicrafts under the direction of Edward T. Hall. Arthur Browning, an independent film director and producer, directed this series which is keyed for adult and elementary school use. The six one reel 16mm. Films are: 1 Elementary manual training. 2 Marionettes, Construction and Manipulation. 3 Elementary book binding. 4 Loom weaving. 5 Decorative metal work. 6 Leather work. Handicraft manuals, published by the Universal School of Handicraft will be available for use with the films.

PSYCHOLOGY OF EXPRESSION

(Continued from Page 9)

in his gift which otherwise would be denied him because of nerve inhibitions. This applies not only to those who today drop by the wayside, disappointments to the fond teachers, and parents, but also to those who do "go on" becoming many times, and often, quite splendid in their chosen field, but quite impossible in their behavior in the social area . . meaning home, daily contacts, etc.

From the third period which might be called manhood growth, the being emerges into what no doubt was meant to be full maturity. If the development has been through all the ways of expression throughout these years, the brain would no doubt be able to take over the control of the body as well as the part of the environment entrusted to it. There would be no stopping of growth throughout life. Different times in life seem to produce different desires, not so obvious as that attached to the adolescence but desires less material, more spiritual in character. There needs be no letting down in growth, for always there will be the opportunity for expression, for creating, for producing beauty, and for those who have been stimulated and guided throughout their body-growing time, into doing whatever is to be done as nearly rhythmical and balanced as is possible, there is no stopping place for achievement and the growth that comes from the achievement. The psychology of achievement is one of the most workable sciences that could be utilized by the human family, and one to which the art procedure can lay just and lasting claim as to its being a vital and component part of it.

As said before, the psychology underlying the above is unorthodox, but it is one which all can understand; it is one which is continually with us; it can and does produce happiness; it carries the imperative that we as human beings are here to "form" body — brain included. That one human being can be condemned to a life of deficiency by others can not be subscribed to as being just, and the great hope of the human family is that all of its members can grow, by ordinary, natural, enjoyable means.